Increasing Temperatures Because of the Climate Change Crisis is a Reproductive Justice Issue in the United States
BACKGROUND

The climate crisis presents major threats to health, harms that will be felt disproportionately by women due to persistent gender inequity worldwide. The more entrenched the discrimination is, the greater the differential impact is likely to be. In the United States, as elsewhere in the world, women, especially women of color, are poorer than men and have fewer resources to fall back on in times of long-term or acute crises, including drought, flooding, heat waves, the impact from hurricanes and other storms, and the Covid-19 pandemic. Women are also more likely than men to be single parents and caregivers, meaning more responsibility and less flexibility or predictability in their lives.

Pregnant people — a group that is mostly women but can include transgender men and non-binary people — as well as the developing fetus, adolescents, and young children, face additional health and nutrition risks, costs, and needs; and may be biologically more sensitive to the environment and pollution. Rising temperatures and extreme weather events can adversely impact the health of individuals while pregnant, the health of the fetus, and children. Pregnant people are more vulnerable to heat stress than healthy people who are not pregnant, and a growing number of studies are finding a correlation between heat exposure and preterm birth and other adverse birth outcomes such as low birth weight and stillbirth. While communities and individuals can take some action to reduce their own carbon emissions and adapt to changes to come, reversing climate change and preparing for health impacts requires serious government action. Under US President Donald Trump there has instead been federal backtracking.

Reproductive justice seeks the fulfillment of international human rights protections, including the right to non-discrimination on the basis of gender, race and ethnicity, among other factors. Reproductive justice also seeks the fulfillment of the right to health, enshrined in international law including the International Covenant on Economic, Social and Cultural Rights (ICESCR), and adopted in some national constitutions, and specifically calls on states to work “for the reduction of the stillbirth-rate and of infant [under 5] mortality and for the healthy development of the child”. This, according to treaty body experts, “may be understood as requiring measures to improve child and maternal health, sexual and reproductive health services, including… pre and postnatal care… and access to information.” International human rights law requires national and local governments to pay special attention to the needs of vulnerable individuals, and protect individuals from discrimination.

Reproductive justice – a movement created in 1984 by Black women’s rights activists in the US that centers the history and experiences of women of color and other marginalized groups – is committed to legal and genuinely equitable access to comprehensive, high-quality reproductive health services and a healthy and safe environment for all women to be pregnant and safely raise children in. See resources at end for SisterSong, Black Women’s Health Imperative, and In Our Own Voice: National Black Women’s Reproductive Justice Agenda.

CLIMATE AND PREGNANCY

“Climate change impacts create cascading and interrelated mental, physical and community health effects”

— US Government Global Change Program, tasked by the US Congress to provide data on climate change to help guide policy and preparations.

As a result of climate change, temperatures across the US are increasing, and heat waves are predicted to increase in intensity and frequency. Alongside impacts on pregnancy, heat kills more people than all other weather-related deaths combined, and heat illness is on the rise. There is a limit to how much heat the human body can adapt to, and even below this limit hotter weather will affect livelihoods that involve significant amounts of outdoor physical activity such as agricultural and construction work, potentially making some regions uninhabitable by the end of the century.

Extreme cuts in carbon emissions are urgently required to prevent the increase of global average temperatures rising above 1.5 degrees C [a watershed temperature limit to prevent drastic changes], cap global heating, and protect human health. However, because so much carbon is already in our atmosphere, even if all countries take immediate action to drastically reduce carbon emissions, temperature increases will continue globally, including in the US.

Given the health impacts, mitigating climate change and adapting to extreme heat and other changes brought by climate change is a reproductive justice imperative:

- Pregnant people are more vulnerable to heat illness than other healthy people. Newborns are also less able to regulate their temperature than other people.
- Studies show a link between exposure to high temperatures and adverse birth outcomes including preterm birth and low birth weight, which in turn are linked to developmental delays and are risk factors for infant morbidity and mortality, and stillbirth.
- Warming temperatures mean more ground-level ozone can form. Ozone is one of the air pollutants that can cause respiratory illness in pregnant people and can lead to low birth weight or preterm birth.
- Increasing temperatures make it more likely wildfire seasons will last longer and be more intense in the US. Some contents of smoke from wildfires (which sometimes consume substances containing plastics and other chemicals) and the controlled burning sometimes used to prevent wildfires, has been linked to preterm birth.
- Pregnant people are more at risk from the expanded geographic range of some vector-borne diseases because of increasing heat and humidity, including Zika virus and Lyme disease, which both impact pregnant people differently than non-pregnant people.
- Pregnant people have increased needs for nutrition, but access to nutrition is imperiled by climate change. For example, rising temperatures will likely reduce how nutritious agricultural produce is, including through reducing protein and minerals like zinc and iron in major crops needed for healthy pregnancies. If future fish consumption patterns are unaltered, increasing ocean temperature would likely further increase mercury exposure in human diets. Methylmercury exposure can affect the development of children, particularly if exposed in utero.
- Pregnant people and people who have recently given birth are at an increased risk for severe stress and other negative mental health outcomes due to weather-related disasters associated with climate change. Pregnant or postpartum people may already be at higher risk of mental health illness than others.
Disasters Linked to Climate Change Hit Women Harder

Remembering Katrina and Maria: Vulnerable to Poor Pregnancy Outcomes

Climate change makes hurricanes hitting the Caribbean and the eastern coast of the US more destructive, an effect that will be disproportionately felt by women. During Hurricane Katrina, which devastated New Orleans and neighboring areas in 2005, women were less likely than men to be able to escape Hurricane Katrina or to cope afterwards. One study found that 25 percent of women in New Orleans were living under the poverty line, compared to 20 percent of men before the hurricane hit. In the aftermath, young, single Black mothers were especially vulnerable to elevated health and mental health illnesses, and the resultant affordable housing crisis impacted poor single mothers most significantly. In Mississippi, domestic violence spiked. In New Orleans, poor birth outcomes (birthweight and gestational age) were associated with exposure to Hurricane Katrina and its aftermath among pregnant women 5-7 years after the hurricane, indicating either direct effects or that individuals who are most vulnerable to disaster may also be more vulnerable to poor pregnancy outcomes. In the aftermath of Hurricane Maria in Puerto Rico in 2017 pregnant women struggled to find care, including emergency obstetric care, and breastfeeding support systems were dysfunctional.

Rising Temperatures Will Hit Pregnant People of Color, Especially Those in Poverty, Hardest

Research has also found that increasing heat due to climate change is harming those with the least resources to protect themselves and their families the most. These communities often experience more exposure to heat and have the least resources to set up barriers to heat, such as air-conditioning. Some factors that can compound vulnerability include:

- **Racism**: Harms to health from the climate crisis in the US should be understood through the wider social and political context of structural racism, including unequal distribution of wealth and resources such as access to healthcare. Dissolutions of climate change are often missed or fail to center social justice concerns, even through extreme weather events, for example, result in uneven and unfairly distributed impacts, hitting those with the least resources, often communities of color, the hardest. One study of preterm birth and exposure to heat found Black and Asian mothers had larger impacts from heat exposure than white mothers. Another found that pregnant Black women had more hospitalizations due to heat exposure during their pregnancy than other women. Another study found that white or college-educated mothers faced lower rates of adverse birth outcomes from heat than others, most likely due to their high socioeconomic status and ability to obtain air-conditioning. In the US, Black people and Native Americans have less air-conditioning coverage, spend a greater proportion of their income on it when they do, and are more likely to live in poor quality housing than white people. These inequities build on many years of environmental injustice for Black women. Social determinants of health, including residence in inner cities with higher exposure to air pollutants and long-term high levels of stress, are known to contribute to adverse obstetrical outcomes for Black women. Research suggests that these environmental exposures exacerbate stressors. Failure to center addressing racism in plans for climate health adaptation now risks exacerbating the impact of historical and existing disregard for Black and brown lives and their health.

- **“Microclimates”**: Researchers across the US are finding that in poorer urban neighborhoods, often where ethnically marginalized groups live, temperatures are higher because, for example, there are fewer trees that provide shade and more buildings and roads that capture heat. One study found that land surface temperatures in redlined areas (neighborhoods adversely impacted by the racially discriminatory government policy of redlining) are on average, 2.6 degrees C warmer than in non-redlined areas and in some cities, as high as 7 degrees C warmer. In some cities, neighborhoods with higher temperatures already have high rates of preterm birth and low birth weight. Despite this, pregnant people’s needs, and pregnant people as a group, are often not included in city heat plans.

- **Labor**: People who work outside, like construction workers and farmworkers, are exposed to more heat. Pregnant farmworkers in the US may have even less negotiating power than other workers to get accommodations from supervisors, such as being allowed to avoid heat or take extra breaks. While 30 states and 5 cities provide protections for pregnant workers in need of accommodation, there is no federal law that provides an explicit right to pregnancy accommodations, though one – the Pregnant Workers Fairness Act – has been introduced in every Congress since 2012. The impact of pesticides on health, including possibly for pregnancy health, may worsen with increasing heat. There is no federal heat standard protecting workers from excessive heat and providing them with protective access to rest, shade, water, training, and protective clothing.

Taking Action

Governments have human rights obligations to protect people from the health harms of climate change, including by adequately funding preparations that include different communities, are tailored to their needs, and are designed to protect the most vulnerable without discrimination. The US should urgently strengthen its climate change policies to reduce emissions in line with the best available science, which requires aligning its emissions reduction targets with the imperative to keep the increase of global average temperature as low as possible and no higher than 1.5 degrees C above pre-industrial levels. Congress should increase funding for health adaptation to the climate crisis, pass federal heat protections for all workers, and pass the Pregnant Workers Fairness Act so that pregnant workers have an explicit right to accommodations, including accommodations to prevent heat-related illnesses during pregnancy.

What Can Local Governments Do?

- **Prevent heat-related illnesses among pregnant workers and farmworkers**
  - Raise awareness, for example through posters or leaflets, that pregnant people are an important at-risk group for heat illness and that exposure to heat is linked to adverse birth outcomes. They should also provide advice around protection from heat and dehydration; and ensure that public websites providing information about heat illness make clear that pregnant people are an important at-risk group. Public information about heat harms, and other health impacts of climate change, should also educate people about the causes of global warming.
  - Ensure pregnant people have access to cooling, such as air conditioning and cooler housing, including through energy assistance programs and tax rebate programs. Other protections could include banning utility companies from disconnecting electricity to any household during periods of dangerous temperatures and promoting local laws that ensure property owners provide cooling during the hottest months.
Coercion Trap: Fertility control is not reproductive justice

Expand greenspaces in urban areas and take other rights-respecting action to cool cities down. Increased tree cover, for example, reduces temperatures and, planning for tree planting and tree coverage maintenance should include consideration of which birth rates and adverse birth outcomes are highest as well as other vulnerabilities to heat.

Ensuring there are no datapoints of non-pregnant women included in distribution planning, including but not limited to heat waves. For example, improve knowledge about access to cooling systems and ensure they are welcoming for pregnant people. Contraceptive choice, emergency obstetric care, and breastfeeding support should be available in the aftermath of extreme weather events such as hurricanes and flooding.

Ensure workplace protections are in place for pregnant workers, including a right to pregnancy accommodations.

What Can Health Providers Do?

Break down barriers to improve access to contraception and sexual and reproductive health care for women of color, single mothers, and people of low socioeconomic status.

What Can Health Providers Do?

Provide information to pregnant women and their families about the importance of protecting themselves from high temperatures and staying hydrated.

Educate their patients that pregnancy puts the mother and developing child at increased risk to adverse health effects of heat exposure and on what measures that can be taken to help prevent these effects such as increased frequency of rest, water, and cooling breaks.

Educate themselves about environmental health, the impact of climate change on the health of their communities, provide information to patients and others and advocate for a healthy environment as a major constituent of human health and wellbeing. Midwives, nurses, and doctors, as well as doula serving their own communities are some of the most trusted sources of information in the US.

Ask pregnant people about their work and exposure to heat. Provide letters to employers to help workers access reasonable workplace accommodations.

LIST OF RESOURCES:

Reproductive Justice: 
SisterSong: https://www.sistersong.org/reproductive-justice
Black Women’s Health Imperative: https://bwhi.org/
In Our Own Voice, National Black Women’s Reproductive Justice Agenda: https://blackcjr.org/
National Latina Institute for Reproductive Justice: https://www.nalatinstitute.org/
Asuncion Valdivia Heat Illness and Fatality Prevention Act of 2019: https://govtrack.us/congress/bill/116/hr1684
Pregnant Workers Fairness Act: https://www.abetterm balance.org/our-campaigns/pregnant-workers-fairness/
National Climate Assessment q: https://nca2018.globalchange.gov/
American Public Health Association: Climate, Health and Equity: A Guide for Local Health Departments:
https://www.apha.org/~/media/files/pdf/topics/centerforclimate_health_equity.ashx
Ibid


6 Ibid.


8 Ibid.


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FACT SHEET: INCREASING TEMPERATURES BECAUSE OF THE CLIMATE CRISIS IS A REPRODUCTIVE JUSTICE ISSUE IN THE UNITED STATES


Leigh Senderowicz, “’I was obligated to accept’: A qualitative exploration of contraceptive coercion,” 2019.

For example, see Public Citizen, “Extreme Heat and Unprotected Workers: Public Citizen Petitions OSHA to Protect the Millions of Workers Who Labor in Dangerous Temperatures,” July 17, 2018.


Bruce Bekkar, MD; Susan Pacheco, MD; Rupa Basu, PhD; Nathaniel DeNicola, MD, MSHP, “Association of Air Pollution and Heat Exposure With Preterm Birth, Low Birth Weight, and Stillbirth in the US: A Systematic Review.”


Leon Sealey-Huggins, “’The Climate Crisis is a Racist Crisis’: Structural Racism, Inequality and Climate Change,” in https://www.hrw.org/news/2019/09/06/pregnancy-path-hurricanes-remembering-puerto-rico#.


Institute for Women’s Policy Research, “Women in the Wake of the Storm: Examining the Post-Katrina Realities of the Women of New Orleans and the Gulf Coast.”


“For example, see Public Citizen, “Extreme Heat and Unprotected Workers: Public Citizen Petitions OSHA to Protect the Millions of Workers Who Labor in Dangerous Temperatures,” July 17, 2018.


Louisiana: The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment


Leigh Senderowicz, “’I was obligated to accept’: A qualitative exploration of contraceptive coercion,” 2019.